

Date: Thu, 21 Oct 93 04:30:50 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V93 #61
To: Ham-Space

Ham-Space Digest Thu, 21 Oct 93 Volume 93 : Issue 61

Today's Topics:

 STS-58 Element Set GSFC-004
 STS-58 SAREX status???

Two-Line Orbital Element Set: Space Shuttle (3 msgs)
 WANTED: Schematics for simple UO-11 demodulator

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 19 Oct 93 21:27:51 GMT
From: swrinde!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!agate!
library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!kakwa.ucs.ualberta.ca!alberta!
adec23!ve6mgs!usenet@network.ucsd.edu
Subject: STS-58 Element Set GSFC-004
To: ham-space@ucsd.edu

SB SAREX @ AMSAT \$STS-58.007
STS-58 Element Set GSFC-004

The following represents the latest Keplerian Element set for STS-58 as
generated by Ron Parise, WA4SIR, at the Goddard Space Flight Center.

STS-58

1	22869U	93	65	A	93292.05313586	0.00042954	00000-0	10319-3	0	44
2	22869	39.0216	126.1627	0006500	284.0177	75.9910	15.95525600			82

Satellite: STS-58

Catalog number: 22869
Epoch time: 93292.05313586 (19 OCT 93 01:16:30.94 UTC)
Element set: GSFC-004
Inclination: 39.0216 deg
RA of node: 126.1627 deg Space Shuttle Flight STS-58
Eccentricity: 0.0006500 Keplerian Elements
Arg of perigee: 284.0177 deg
Mean anomaly: 75.9910 deg
Mean motion: 15.95525600 rev/day Semi-major Axis: 6664.9825 Km
Decay rate: 0.43E-03 rev/day*2 Apogee Alt: 290.93 Km
Epoch rev: 8 Perigee Alt: 282.26 Km

NOTE - This element set is based on NORAD element set # 004.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

/EX

Date: 20 Oct 1993 00:06:47 -0400
From: digex.net!digex.net!not-for-mail@uunet.uu.net
Subject: STS-58 SAREX status???
To: ham-space@ucsd.edu

In article <2a1mfs\$9bl@agate.berkeley.edu> marchant@sdp1.cea.berkeley.edu writes:

>
> I've listened in to all the STS-58 passes for Northern California and haven't
> heard a peep out of the SAREX package. Anybody heard or worked it? Anybody
> willing to volunteer hard info? Thanks!

SAREX wasn't activated until 18:30 UTC on Oct 19. Keep listening on 145.55.

Ken Bass
K4EVH

Date: Tue, 19 Oct 1993 19:12:57 GMT
From: iris.mbvlab.wpafb.af.mil!blackbird.afit.af.mil!tkelso@uunet.uu.net
Subject: Two-Line Orbital Element Set: Space Shuttle
To: ham-space@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

STS 58

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1 22869U 93 65 A 93291.99056187 .00042954 00000-0 10319-3 0 47
2 22869 39.0216 126.5786 0006503 283.4796 76.5717 15.95520172 53
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Dr TS Kelso
tkelso@afit.af.mil

Assistant Professor of Space Operations
Air Force Institute of Technology

Date: Tue, 19 Oct 1993 13:13:16 MDT

From: dog.ee.lbl.gov!agate!library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!
nntp.cs.ubc.ca!alberta!adec23!ve6mgs!usenet@network.ucsd.edu

Subject: Two-Line Orbital Element Set: Space Shuttle

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1 22869U 93 65 A 93291.99056187 .00042954 00000-0 10319-3 0 47
2 22869 39.0216 126.5786 0006503 283.4796 76.5717 15.95520172 53
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Dr TS Kelso
tkelso@afit.af.mil

Assistant Professor of Space Operations
Air Force Institute of Technology

Date: Wed, 20 Oct 1993 16:40:34 GMT
From: darwin.sura.net!howland.reston.ans.net!usenet.ins.cwru.edu!lerc.nasa.gov!
magnus.acs.ohio-state.edu!cis.ohio-state.edu!udecc.engr.udayton.edu!
blackbird.afit.af.mil!tkelso@@haven.umd.edu
Subject: Two-Line Orbital Element Set: Space Shuttle
To: ham-space@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

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STS 58

1 22869U 93 65 A 93292.58333332 .00042051 00000-0 98794-4 0 67
2 22869 39.0187 122.6348 0005886 299.5785 230.6978 15.95764552 155

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Dr TS Kelso Assistant Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: Wed, 20 Oct 1993 17:32:58 GMT
From: tarpit!tous!fang!att!devildog!newsadm@uunet.uu.net
Subject: WANTED: Schematics for simple UO-11 demodulator
To: ham-space@ucsd.edu

I'm looking for a simple circuit that I've heard about, but I can't find the schematics for it! It will take the audio from the UO-11 telemetry beacon and convert it to RS-232 (or TTL levels). The circuit I'm thinking of used only a few chips and wasn't the high performance type, but it worked well on high elevation/low noise passes. I went looking and checked the following references. I could not find it in *ANY* of :

- (1) ARRL Handbook (mine is the 1990 Edition)
- (2) Satellite Experimenter's Handbook (2nd edition)
- (3) Satellite Anthology (2nd edition)

Apparently, it USED TO BE in the FIRST edition of these, but it isn't in the SECOND editions. (Replaced by Microsat articles apparently.)

I'm willing to pay reasonable photocopy and postage expenses
if someone will send me the schematic and description.
(Specific references to an issue of 73, QST or other magazine
or book are also welcome.)

Douglas Quagliana
dquagliana@attmail.com

End of Ham-Space Digest V93 #61
